

**FINAL
MITIGATED NEGATIVE DECLARATION**

**Mill Creek Acquisition
Culvert Repair Project**

June, 2007

Lead Agency



State of California
DEPARTMENT OF PARKS AND RECREATION

MITIGATED NEGATIVE DECLARATION

PROJECT: Mill Creek Acquisition
Culvert Repair Project

LEAD AGENCY: California Department of Parks and Recreation

AVAILABILITY OF DOCUMENTS:

The Initial Study for this Mitigated Negative Declaration was made available throughout the 30-day public review period at the reference desks of the Del Norte County Library located in Crescent City. It was also available at the public information desks of DPR's Northern Service Center and North Coast Redwoods District Headquarters offices. The Final Mitigated Negative Declaration and all supporting materials will be available, by request, at DPR's North Coast Redwoods District Headquarters office.

PROJECT DESCRIPTION:

DPR proposes to make the improvements described herein to the Mill Creek Acquisition (MCA) watersheds. The following is a summary of the planned improvements:

The project will repair 155 stream-crossings that pose a risk of failure in the immediate future. Old rusting, crushed, broken, undersized, or improperly installed culverts will be replaced by new rock armored crossings, culverts and bridges properly sized to pass the 100-year flood flow. The approach to the crossings will be reengineered to improve road drainage, and fail-safe dips will be installed where necessary to prevent stream diversion. The entire road system may also receive minor maintenance and upgrades including grading, rolling dip installation, outsloping, compaction, and rock surfacing where necessary. In addition, two 0.2-km dead end sections of road will be recontoured and associated crossings removed because they have a high potential to fail, and are not needed as part of the administrative road system.

FINDINGS:

An Initial Study has been prepared to assess the proposed project's potential impacts on the environment and the significance of those impacts and is incorporated in the Draft MND. Based on this Initial Study, it has been determined that the proposed project would not have any significant impacts on the environment, once all proposed mitigation measures have been implemented. This conclusion is supported by the following findings:

- There was no potential for adverse impacts on Aesthetics, Agricultural, Land Use & Planning, Mineral Resources, Population & Housing, Recreation, and Utilities & Service Systems associated with the proposed project.
- Potential adverse impacts resulting from the proposed project were found to be less than significant in Transportation & Traffic.
- Full implementation of the proposed mitigation measures included in this MND would reduce potential project-related adverse impacts on Air Quality, Biological, Cultural,

Geology & Soils, Hazards & Hazardous Materials, Hydrology & Water Quality, Noise, and Public Services to a less than significant level.

MITIGATION MEASURES

The following mitigation measures have been incorporated into the scope of work for the Mill Creek Acquisition Culvert Repair Project and will be fully implemented by DPR to avoid or minimize adverse environmental impacts identified in this MND. These mitigation measures will be included in contract specifications and instructions to DPR personnel involved in implementing the project.

AIR QUALITY

AIR-1

- All equipment engines will be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.
- Traffic speed on unpaved roads will be limited to 15 miles per hour (mph).
- Excavation and grading activities will be suspended when sustained winds exceed 25 mph, instantaneous gusts exceed 35 mph, or when dust from construction might obscure driver visibility on public roads.
- No more than ten pieces of heavy equipment will operate at the sites at the same time. No more than ten service vehicles will enter the project site at one time.
- If previously unknown asbestos is encountered in concentrations greater than 1% during construction, soil wetting will be used to suppress all visible dust. Soils will be maintained at a moisture level that will not generate dust. Soil wetting will be conducted so as not to generate any surface runoff into watercourses. Water drafting will be conducted in accordance with the National Marine Fisheries Service, 2001 Water Drafting Guidelines. Access roads to the work site will be posted to alert drivers to the potential exposure to asbestos. All equipment will be rinsed of soil prior to leaving the asbestos containing work area to prevent track-out.

BIOLOGICAL

BIO-1 (PLANTS)

- Prior to operations surveys will be conducted by a qualified botanist within the project boundaries (all areas of proposed operations and adjacent areas that could be impacted where sensitive plant habitat is present). Surveys will be conducted in conformance with the DFG "Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities" (www.dfg.ca.gov/whdab/pdfs/guideplt.pdf and Appendix D). Results of the survey effort will be submitted to the Senior Environmental Scientist and the DFG at least 10 business days prior to commencing operations to allow sufficient time for review of the survey effort.
- DPR's primary means of mitigation for plants listed as Rare, Threatened, and Endangered, or which occur on the CNPS Lists 1A, 1B or 2 will be avoidance (see below). These measures are dependent on the species natural history and the potential for adverse affects or the potential for take. CNPS List 3 and 4 plants will be avoided when feasible; however, avoidance will not be required.
- Fens will be provided with a minimum 25-foot equipment exclusion zone and the hydrology supporting the fens will not be altered.

Species Name	Common Name	Mitigation
		Wetland Shade Associated Species
<i>Lilium occidentale</i>	western lilly	A 75 foot equipment exclusion zone will be established around plants or populations. Within this buffer the overstory canopy will not be altered or removed nor will the hydrology associated with the habitat be altered.
<i>Mitella caulescens</i>	leafy-stemmed miterwort	
<i>Pinguicula vulgaris</i> ssp. <i>macroceras</i>	horned butterwort	
<i>Smilax jamesii</i>	English Peak greenbriar	
<i>Viola primulifolia</i> ssp. <i>occidentalis</i>	western bog violet	
		Wetland Associated Species
<i>Carex leptalea</i>	flaccid sedge	A 25 foot equipment exclusion zone will be established around plants or populations. The hydrology associated with this habitat will not be altered.
<i>Carex praticola</i>	meadow sedge	
<i>Carex viridula</i> var. <i>viridula</i>	green sedge	
<i>Castilleja miniata</i> ssp. <i>oregano</i>	Siskiyou indian paintbrush	
<i>Epilobium oreganum</i>	Oregon fireweed	
<i>Gentiana setigera</i>	Mendocino gentian	
<i>Lathyrus palustris</i>	marsh pea	
<i>Lewisia oppositifolia</i>	opposite-leaved lewisia	
<i>Montia howellii</i>	Howell's montia	
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	
<i>Sanguisorba officinalis</i>	great burnet	
		Forest Shade Associated Species
<i>Asarum marmoratum</i>	marbled wild ginger	A 75 foot equipment exclusion zone will be established around plants or populations. Within this buffer the overstory canopy will not be altered or removed.
<i>Erythronium hendersonii</i>	Henderson's fawn lilly	
<i>Erythronium howellii</i>	Howell's fawn lilly	
<i>Monotropa uniflora</i>	indian-pipe	
<i>Saxifrage nuttallii</i>	Nuttall's saxifrage	
		Forest and Scrub Associated Species
<i>Arabis koehleri</i> var. <i>stipitata</i>	Koehler's stipitate rock cress	A 25 foot equipment exclusion zone will be established around plants or populations.
<i>Arabis macdonaldiana</i>	McDonald's rock cress	
<i>Arienium trichomanes</i> ssp. <i>trichomanes</i>	maidenhair spleenwort	
<i>Arctostaphylos hispidula</i>	Howell's manzanita	
<i>Boschniakia hookeri</i>	small groundcone	
<i>Cardamine nuttallii</i> var. <i>gemmata</i>	yellow-tubered toothwort	
<i>Minuartia howellii</i>	Howell's sandwort	
<i>Pyrrocoma racemosa</i> var. <i>congesta</i>	Del Norte pyrrocoma	
<i>Senecio bolanderi</i> var. <i>bolanderi</i>	Seacoast ragwort	
<i>Sidalcea malachroides</i>	Maple-leaved checkerbloom	
<i>Sidalcea malviflora</i> ssp. <i>patula</i>	Siskiyou checkerbloom	
<i>Sidalcea oregana</i> ssp. <i>eximia</i>	Coast checkerbloom	
<i>Streptanthus howellii</i>	Howell's jewelflower	
<i>Thermopsis robusta</i>	Robust false lupine	

BIO-2 (FISH)

- Stream crossing excavations will take place in dry channels or in channels where stream flow is diverted around the excavation sites. Construction specifications have been designed to limit negative effects on water quality to the maximum extent practicable.
- In some crossings, where the stream is flowing at a slow rate and cannot be captured and diverted, filter structures will be installed downstream to filter turbid discharge from the worksite. In other crossings, where flow is sufficient to be intercepted, a small diversion dam will be built upstream and stream flow piped around the worksite and discharged into the stream below the worksite.
- It is anticipated that most of the work will occur outside of the rainy season (June 1st to October 15th). Construction activities after October 15th will only occur during periods when no precipitation is occurring and when no precipitation is forecasted for the following day.
- If periods of dry weather are predicted after October 15th, small additional work items may be done with DFG approval, if they can be completed within the window of dry weather. DPR will have materials to sufficiently mulch bare work areas on-site at all times. Work will be conducted with weekly consultation with DFG regarding weather forecasts and streamflow conditions. Work will be conducted so that no more than one-half day will be required to finish all earth moving and mulching work. All access roads will be winterized prior to any additional earth moving tasks.
- Streams and riparian zones will not be used as equipment staging or refueling areas. Equipment will be stored, serviced and fueled away from riparian areas. Heavy equipment will be cleaned (e.g., power washed, steam) prior to moving onto the project site.
- DPR will ensure that contract(s) associated with the project contain all of the relevant BMPs, and other descriptions of sideboards and measures identified in this MND and in other documents associated with consultations for this project as necessary to avoid impacts to SONCC coho salmon. If DPR determines that the contractor is not in compliance with the project contract, and non-compliance could result in impacts to SONCC coho salmon, DPR will cease and desist all operations and evaluate the contractor's performance. If the Contractor's performance cannot be corrected the contract will be terminated.

BIO-3 (NORTHERN SPOTTED OWLS)

1. All culvert sites located outside of the 500 foot northern spotted owl nesting-roosting habitat buffer would not be encumbered and operations could begin as soon as site conditions permit.
2. Sites located within the 500 foot northern spotted owl nesting-roosting habitat buffer would either be
 - a. Surveyed to determine the presence/absence of NSO (see measure 3) or,
 - b. Temporal buffers would be applied which would result in no activities allowed within the 500 foot buffer until after July 10.
3. Sites located with northern spotted owl nesting-roosting habitat that may result in the removal of habitat (trees ≥ 12 dbh) would be assessed by a qualified DPR NSO biologist to determine if the operations would result in the loss of functional nesting or roosting habitat. If determined that the project will not result in the loss of functional habitat then

no surveys will be necessary and measure 2(b) will be applied. If determined that the project will result in the loss of functional habitat then protocol surveys will be conducted to determine the presence-absence of NSO and one of the following will apply:

- a. If the protocol surveys do not detect the presence of NSO then measure 2(b) will be applied.
 - b. If the protocol surveys detect the presence of NSO then
 - 1) No operations within 500 feet of the activity center would be allowed until after July 31 or
 - 2) A 500 foot spatial buffer would be maintained between the nest and/or offspring until July 31.
4. All options would require obtaining a valid Letter of Technical Assistance from the USFWS.

BIO-4 (MARBLED MURRELET)

1. No operations will occur at the sites located within the MAMU buffer area (0.25 miles from habitat) from March 24 – September 15 of each year.

BIO-5 (FALCONIFORMES AND STRIGIFORMES)

1. Pursuant to Fish & Game Code 3503.5 it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. Therefore prior to operations the DPR inspector will be instructed in the identification of raptor nests (both occupied and unoccupied) and raptor breeding behavior by the District's Senior Environmental Scientist or his designee. During operations the inspector will be responsible for assuring that no raptor nests are impacted by the proposed treatments by implementing the following measures:
2. If an unoccupied raptor nest is detected (during the generic critical period of January 15 through August 31), the nest tree and surrounding screen trees will not be disturbed and the location will immediately be reported to the Senior Environmental Scientist.
3. If an unoccupied raptor nest is detected outside of the generic critical period then operations will cease in the vicinity of the nest and its location will be reported immediately to the Senior Environmental Scientist. The Senior Environmental Scientist or his designee will then attempt to determine the species of raptor which constructed or used the nest and then the measures stated below under Item C will be applied (based on species).
4. If an occupied raptor nest is detected in the project area, then the DPR inspector will cease operations within ¼ mile of the raptor nest (unless it is known to be a peregrine falcon eerie then a 1 mile buffer will be applied) and immediately notify the Senior Environmental Scientist. The Environmental Scientist or his designee will then determine the species of raptor and then the following measures which were developed in concert with DFG (Scott Osborn, DFG pers. comm. 04/13/05) will be applied (based on species).

<i>Species¹</i>	<i>Critical Nesting Period</i>	<i>Temporal (Disturbance) Buffer</i>	<i>Spatial (Habitat) Buffer</i>
ACCIPITRIDAE			
Northern Goshawk	March 1 – August 31	400 m (0.25 mile)	50m (165 ft.)
Cooper's Hawk	March 1 – August 31	400 m (0.25 mile)	30 m (100 ft.)
Sharp-shinned Hawk	March 1 – August 31	400 m (0.25 mile)	30 m (100 ft.)
Osprey	February 15 – August 31	400 m (0.25 mile)	30 m (100 ft.)
Redtail Hawk		400 m (0.25 mile)	15 m (50 ft.)
Red-shoulder Hawk	February 1 – August 31	400 m (0.25 mile)	15 m (50 ft.)
FALCONIDAE			
Peregrine Falcon	January 15 – August 31	1.6 km (1 mile)	150 m (500 ft.)
STRIGIFORMES			
Great Horned Owls	February 1 – August 31	400 m (0.25 mile)	30 m (100 ft.)
Cavity Nesting Owls	February 1 – August 31	400 m (0.25 mile)	30 m (100 ft.)
¹ Mitigation measures for the northern spotted owl are covered above. Other species of raptors such as the golden eagle, northern harrier, bald eagle, or long-eared owl are not expected to occur within the project area due to lack of habitat and are therefore not addressed.			

BIO-6 (AMPHIBIANS)

- If a culvert cannot be placed without a hanging or "shot-gun" outlet, rock riprap will be placed around the outlet so that the water does not fall out of the culvert, but rather cascades over the rock. The rock will be placed to provide amphibians the ability to potentially climb into the mouth of the culvert.

BIO-7 (TREES)

- Equipment operators will be required to avoid striking retained trees to minimize damage to the tree structure or bark. Contract specifications will establish fines for any damage to retained trees and fines will be levied on the contractor for such damage.

CULTURAL

CULT-1

- Prior to work on culverts that were not part of the initial survey, these culvert locations must be surveyed by a DPR qualified archaeologist. If any cultural resources are detected as part of the investigation a minimum 25 foot equipment exclusion zone shall be established around the resource.

CULT-2

- Operations must avoid all features of archaeological site MCA-06-01 which are located adjacent to the Hamilton Road 1.04, 1.23, 1.32, and 1.58 culvert repair sites. If operations occur within 25 feet of the standing trestle remnants then safety fencing or Jersey barriers will be placed around the resource or a DPR qualified archaeologist will be present during project implementation to direct avoidance of inadvertent impacts to these resources.

CULT-3

- In the event that previously unknown cultural resources are encountered during project construction by anyone, the State's Representative will put work on hold at that specific location and contractors will be redirected to other tasks. A DPR-qualified archaeologist will record and evaluate the find and work with the State's Representative to implement

avoidance, preservation or recovery plans.

CULT-4

- In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate DPR personnel. Any human remains and/or funerary objects will be left in place. The DPR Sector Superintendent (or authorized representative) will notify the County Coroner, in accordance with §7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (NAHC) will be notified within 24 hours of the discovery if the Coroner determines that the remains are Native American. The NAHC will designate the "Most Likely Descendent" (MLD) of the deceased Native American. The MLD will recommend an appropriate disposition of the remains. If a Native American monitor is on-site at the time of the discovery and that person has been designated the MLD by the NAHC, the monitor will make the recommendation of the appropriate disposition.

GEOLOGY AND SOILS

GEO-1

- All workers will be advised of high-risk areas and cautioned to use extreme care while working in those areas.
- All heavy equipment operators will be required to have experience working in conditions similar to the proposed project.
- A qualified inspector, trained in landform rehabilitation, will monitor equipment operation.
- Hand crews or other workers on the ground will be required to position themselves upslope of sites where excavations are actively under construction.
- Heavy equipment operators will be cautioned to minimize their exposure to unstable slopes that may occur naturally or result from the earthmoving process. Inspectors will continually evaluate slope geometry and caution operators if unstable conditions are indicated.

HAZARDS AND HAZARDOUS MATERIALS

HAZMAT- 1

- All equipment will be inspected for leaks immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from the Park. Leaks that develop will be repaired immediately in the field or work with that equipment will be suspended until repairs could be made.
- The contractor(s) will prepare an emergency spill response plan prior to the start of construction. DPR will ensure that the contractor maintains a spill kit on-site throughout the life of the project, or provides multiple sets of cleanup materials to each crew, if sharing will prevent timely implementation of cleanup plans. In the event of any spill or release of any chemical in any physical form on or immediately adjacent to the project sites or within the MCA during construction, the contractor will immediately notify the appropriate DPR staff (e.g., project manager or supervisor). Appropriate agencies will be notified in the event of significant spillage.
- No maintenance or fueling activities will be permitted within 200 feet of a stream.
- Equipment will be cleaned and repaired (other than emergency repairs) outside the Park boundaries. All contaminated water, sludge, spill residue, or other hazardous

compounds will be disposed outside park boundaries, at a lawfully permitted or authorized designation.

HAZMAT-2

- If there is evidence of spillage from or free product discovered on or adjacent to the project sites, work will be halted or moved to a nearby location and DPR's Sector hazardous materials coordinator will be contacted. Hazardous materials, if present, will be contained and removed from the site prior to resumption of work. Reengineering of all contaminants, including sludge, spill residue, or containers, will be conducted following established DPR procedures and in compliance with all local, state, and federal regulations and guidelines regarding the handling and disposal of hazardous materials.
- Abandoned vehicles located within the project sites will be removed and disposed of under the supervision of the hazardous materials coordinator.

HAZMAT-3

- A fire safety plan will be in place prior to the start of any construction, including availability of identified fire suppression equipment and any required employee training.
- Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers will be required for all heavy equipment.
- Construction crews will be required to park vehicles away from flammable material such as dry grass and brush. At the end of each workday, heavy equipment will be parked over mineral soil to reduce the chance of fire. Equipment will also be required to park in locations that will minimize prolonged exposure to slope failure. All equipment will be required to be mechanically sound and free of flammable debris.
- Park staff will be required to have a State Park radio on site, which allows direct contact to California Department of Forestry and Fire Protection and centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire.

HYDROLOGY AND WATER QUALITY

HYDRO-1

- If a stream has running water, it will be diverted away from excavation areas to reduce turbidity and returned to the channel immediately downstream. Where channels are narrow, a small diversion dam will be built upstream using soil-filled sandbags and stream flow piped around the worksite and discharged into the stream below the worksite. Instream filters will be installed where diversion is not possible due to insufficient flow. The project inspector will carefully monitor the structures to prevent failures.
- If the crossing has already partially failed, a small road bench will be reconstructed along the upstream end of the crossing to allow access to both sides of the crossing. A minimal amount of fill will be used and streamflow (if present) piped around the site or a culvert installed to convey streamflow under the temporary road.
- All temporary berms, ponds, and piping will be completely removed at the completion of construction.

HYDRO-2

- Following October 15th of any work year, all culvert repair sites will have erosion control in place by the end of each work day. All stream crossing culvert repair work will be completed by the end of each day.

- Following October 15th of any work year, work will not proceed in any area where soils have become saturated. Construction work will generally be limited to the dry periods of the year, when rain is unlikely, and no work will occur in locations where surface runoff occurs. No work will occur after October 15th at sites where insufficient brush mulch exists to achieve uniform coverage.
- All stream crossing sites will be photo documented following treatment to enable rough-estimate, quantitative assessment of post-treatment adjustments. Selected stream crossing sites will be reviewed in the field during the first winter following treatment to identify any deficiencies in treatment or treatment techniques.

NOISE

NOISE-1

- Construction activities will generally be limited to the hours between 6 a.m. and 6 p.m.
- Internal combustion engines used for any purpose at the job site will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction will utilize the best available noise control techniques (e.g., engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.

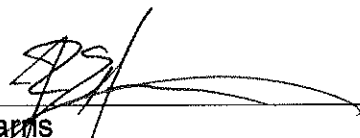
PUBLIC SERVICES

- Refer to mitigation measure Hazmat-3.

No significant corrections, additions, and deletions have been made to the Mill Creek Acquisition Culvert Repair Project Draft MND. Minor punctuation, spelling, and grammatical corrections that contribute to ease of understanding, but have no significant impact on the content, have not been noted.

This document, along with the Draft Initial Study/Mitigated Negative Declaration (SCH#2007042091), corrected as noted above; Comments and Response to Comments; Mitigation Monitoring and Reporting Program; and the Notice of Determination, constitute the Final Mitigated Negative Declaration for the Mill Creek Acquisition Culvert Repair Project at Del Norte Coast Redwoods State Park.

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.



John E. Harris
District Environmental Coordinator

06/01/07

Date



Steve Horvitz
Superintendent, North Coast Redwoods District

06/01/07

Date